National Aeronautics and Space Administration.

Decommissioning News.

A newsletter to inform the public about NASA's Decommissioning Activities.

Twenty-Fourth Edition. March 2008.

Project Update.
NASA off to Good Start in First Quarter of 2008.

Spring is just weeks away, and people are thinking about losing pounds and inches gained during the winter. Throughout the winter, the Plum Brook Reactor Facility (PBRF) has been losing pounds and inches, with the results bringing the Decommissioning Project a few steps closer to completion. On January 16, NASA successfully shipped a total of seven steel and cadmium control rods, which had once been used to help govern nuclear fission activity in the reactor when it was operational. The rods had been stored inside a steel canister for the past three years, with that container subsequently placed inside a 40-ton concrete cask for temporary storage at Plum Brook Station. The January shipment entailed using a crane to lift the steel canister from the temporary cask into a larger steel container known as an "overpack," which had been inserted into a concrete shipping cask. This cask, mounted aboard a flatbed truck, was subsequently shipped to the U.S. Department of Energy's Nevada Test Site for permanent disposal.

The shipment represented the largest source of mixed waste (a combination of radioactive and hazardous waste) that remained on site from decommissioning, and paved the way for several hundred tons worth of low-level radioactive waste (LLRW) shipments that will take place this spring and summer. The waste to being shipped - including fixed equipment removed from PBRF buildings - had been packaged and temporarily stored at PBRF since the last waste shipments were made in fall 2005. The LLRW will be sent to the Energy Solutions licensed disposal facility in Utah.

While preparing to make the PBRF much leaner, workers from radiological contractor MOTA Corp. have also literally been shaving away inches from the facility's buildings and structures. Workers are continuing to use high-powered hand tools and excavation equipment to scrape away lightly contaminated concrete from the walls, floors and ceilings in Reactor Facility buildings.

Project Update article photos.

- In the photo in the upper left, A shipment of cadmium-containing control rods leaves the Scheid Road gate at Plum Brook Station in January.
- In the photo in the lower right corner, MOTA workers remove asbestos from the floor of Quadrant D in the Containment Vessel.

CONTINUED ON PAGE 2.

NASA MOVING FORWARD ON FINAL STATUS SURVEY WORK.

NASA ended 2007 with another major Decommissioning Project accomplishment: the completion of Final Status Survey (FSS) field work in a Reactor Facility building. Just before Christmas, workers from subcontractor SAIC completed surveying for existing radiation content throughout the entire three-story Reactor Office and Laboratory Building. NASA Decommissioning Program Manager Keith Peecook reflected, "A clean building is really the finished product of decommissioning, so completing the first building was exciting."

The momentum continued into 2008, as the SAIC group finished similar work in the Cold Pipe Tunnel and is nearing completion in the adjacent Service Equipment Building, and the Sub-pile Room. FSS field work began last September, after the U.S. Nuclear Regulatory

Nasa Moving Forward article photo.

- In the photo to the left, Signs in a corridor of the Reactor Office and Lab Building show the area is ready for Final Status Survey work.

CONTINUED ON PAGE 4.

OTHER WAYS TO RECEIVE DECOMMISSIONING Information.

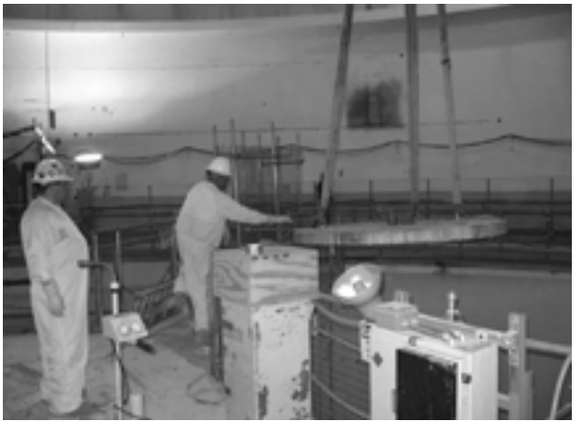
Decommissioning Website.
For project updates, fact sheets, newsletters, and to ask questions, visit us at www.grc.nasa.gov/WWW/pbrf

24-Hour Toll-Free Information Line.
For recorded project updates and to ask questions, call 1-800-260-3838

Community Information Bank.
To review documents, visit the Decommissioning Project information repository at the BGSU Firelands Library.

Speakers.
To arrange for a NASA representative to make presentations to civic, community and school organizations, contact
Sally Harrington
NASA Public Affairs Specialist
216-433-2037, or
email: s.harrington@grc.nasa.gov
or call 1-800-260-3838

Project Update (Continued from page 1).



They vacuum away the resulting dust, then survey the underlying concrete until it meets project cleanup levels (see Final Status Survey article on page one). The fractions of inches shaved in decontamination add up to inches and pounds that are subsequently placed in sealed containers for eventual disposal. The process also results in clean concrete as more rooms - and then buildings - are readied for final surveying.

NASA has completed decontamination in the Primary Pump House (PPH), once the heart of the PBRF cooling system. The PPH was the first building to undergo initial decontamination work (in 2004), and served as a sort of pilot site, as NASA tested a variety of tools and techniques before refining the overall approach to decontamination. Decontamination is also complete in the Fan House, which once housed the Reactor Facility's ventilation system; the Sub-pile Room (an area in the Containment Vessel beneath the former location of the reactor tank); Cold Pipe Tunnel (which held air and water lines when the reactor was operational); Waste Handling Building and Hot Lab Building (where reactor experiments once were analyzed).

Asbestos removal continues in the Containment Vessel, that formerly housed the reactor - which was removed in early 2004. NASA found there was asbestos content in the mastic - an adhesive substance covering concrete surfaces in the former quadrants and canals of the Containment Vessel. The mastic had protected the concrete from radiation and once removed, it gave way to clean, smooth surfaces that meet project cleanup levels. Since decommissioning began in 2002, more than 99% of the radioactive inventory on-site before the start of work has been safely removed and shipped for disposal.

While the decontamination of buildings continues, workers from pipe cleanup contractor BSI have just about completed grouting operations (pumping a concrete-like substance into cleaned pipes to stabilize them) in nearly two miles of embedded piping located at least three feet below grade. They are also removing a few hundred feet of piping that is being dug up and disposed of as low-level radioactive waste, piping considered too corroded to remain in place. NASA Decommissioning Program Manager Keith Peecook remarked, "This may not be glamorous work, but accomplishing it is what is putting us in the home stretch of decommissioning."

Looking ahead, Peecook is also encouraged by the number of contractors who submitted proposals for work under the Decontamination and Waste Disposal Contract, which addresses all the remaining project tasks. These include completing decontamination work, excavating, packaging and shipping some 10 million pounds of lightly contaminated soil and cleaning up Pentolite Ditch, which was once the designated pathway for normal water discharges from the reactor. He expects the contract to be awarded in April, with work starting in June. "We have a few more miles to go," Peecook observed. "But every day brings us closer to completing the Decommissioning - even if it's inches at a time." ■

Project Update continued article photos.

- In the photo in the upper right corner, An excavating machine takes soil from a trench in the Hot Lab's Warm Work Area, placing it in a container during buried piping removal work.
- In the photo in the upper right, Workers from MOTA guide the lifting of a steel plate that once sat at the bottom or the reactor cavity, above the Sub-pile Room.

Old and New Friends Make for Successful Community Information Session.

Some came to learn about the decommissioning of a large and historic facility; others to learn about the future of NASA Plum Brook Station (PBS). NASA Glenn Research Center held its 8th annual Community Information Session (CIS) last October at Sandusky High School. While the evening's focus was updating the public on progress in decommissioning the Plum Brook Reactor Facility, a record number of visitors also learned about the exciting research work planned for the active PBS facilities.

Students of all ages, many accompanied by parents and even grandparents, were in attendance. Encouraged by principals and teachers to attend, students from Sandusky and Perkins High Schools - and the EHOVE Career Center - were also present for the Decommissioning Project Community Workgroup meeting, held just before the CIS. The bringing together of NASA's past, present and future was much in evidence. Displays on Decommissioning and the Reactor Facility's history - staffed by members of the Decommissioning Team and the NASA Glenn History Office - were augmented by PBS displays on future NASA missions, and by robotics demonstrations given by the Mavericks, an EHOVE student team that had won an award at a NASA-sponsored competition. Some 130 area residents attended the CIS, with many completing feedback forms. They cited the displays, speaking with NASA personnel, the robotics demonstrations and the Aero Bus (NASA Glenn's traveling educational exhibit) as the best features of the CIS.

Many attendees made their first visit. Arlie Brooks of Monroeville heard about the CIS from his son, Travis, a Perkins High student, and found it "really interesting, especially the (facility's) history." He added, "We live out in the country, so it's nice to see what's going on in the neighborhood." Sandusky real estate agent Linda Armstrong read about the CIS in the *Sandusky Register* and said, "I like to know what's going on, in case out-of-town buyers ask me." She found the event "very educational, especially some of the decommissioning and history displays." She said the CIS was helpful in explaining the entire NASA mission at PBS, as she believes many people still see it as "the mystery behind the fence."

According to NASA Glenn Public Information Specialist Sally Harrington, this CIS "was our most diverse and well-attended. We were glad to see many old friends, and to welcome many people for the first time. We look forward to seeing them again at future decommissioning events." ■

Old and New Friends article photo.

■ In the photo in the upper right, Community Information Session attendees visited a series of project displays, including one staffed by Ruth Haag (center of photo) of NASA consultant Haag Environmental.

NASA to Make Presentation at BGSU Firelands Elder College.

NASA managers and staff donate their time to make a number of community presentations. On Monday April 14, from 1:30 to 3:30 p.m. Decommissioning Program Manager Keith Peecook, and David Taylor of NASA Plum Brook Station, will make a presentation to the BGSU Firelands ElderCollege. The presentation will take place at the Cedar Point Center on the College's Huron campus. Keith will discuss progress on the Decommissioning Project while David will talk about testing being conducted at Plum Brook Station's active facilities. The ElderCollege provides community members age 50 and older with an opportunity to attend a number of classes and programs throughout the academic year for a modest annual or per semester fee. All members of the public may attend any event for a per class fee. For information on ElderCollege courses and fees, contact Lori Peugeot at (419) 433-5560 (ext. 20617) or lpeugeo@bgsu.edu ■

COMMUNITY WORKGROUP MEMBER PROFILE.

Lois TerVeen.

Lois TerVeen has been a naturalist at Erie MetroParks since 1995 and supervises its program services. The Bellevue native, a graduate of Bowling Green State University with a degree in Special Education, has had three careers, noting, "I've been into nature for about 20 years." TerVeen was teaching "severely handicapped students" but her first pregnancy kept her from lifting students from wheelchairs. She then began volunteering at nature centers and museums in California, where she had moved with her husband, Jan TerVeen, then a U.S. Coast Guard officer. "I'm a Coast Guard wife," she said of her third career, which took them to Marine Inspection postings in Memphis (TN), Davenport (IA), Paducah (KY), Cleveland, and Long Beach, (CA). While stationed in Long Beach, she gained considerable experience at the Bosa Chica Ecological Reserve in Huntington Beach and the El Dorado Nature Center in Long Beach.

When Jan retired as a Commander in 1994, Lois felt it time to return to Bellevue, saying, "I was enchanted with the idea of raising the children (sons Jay, now a Coast Guardsman in Toledo and Mark, a musician in Lakewood) in a small town." She was working as a private school teacher and at the Lake Erie Nature and Science Center in Cleveland, when she saw an advertisement in the *Sandusky Register* ("the first day I subscribed") for a naturalist at Erie MetroParks, and got the job. Meanwhile, Jan pursued his avocation - golf - and is now the golf coach at Bellevue High School, and a real estate office manager.

Lois has long been familiar with NASA. Her uncle, the late Don Miller, was a nuclear physicist at the Reactor Facility, moving on to the U.S. Nuclear Regulatory Commission when the facility closed in 1973. Jan's grandmother was a Plum Brook Ordnance Works employee. Lois is also familiar with Decommissioning, having attended a presentation by NASA Program Manager Keith Peecook in 2002 and noting that MetroParks hosted a Workgroup meeting in 2003. She's also been involved in MetroParks' Plum Brook prairie tours with fellow Workgroup member John Blakeman.

Lois, who joined the Workgroup last July, views Decommissioning as "an outstanding program. The work has been methodical - not rushed. NASA has had a carefully laid out plan over a number of years." She also termed NASA's outreach efforts "A real model...to explain when something is controversial, and get the public involved." She views the Workgroup as "an outstanding way to do something (public) throughout the entire process." In short, Lois TerVeen came home again, and both nature and NASA are better for it. ■

NASA Moving Forward on FSS (Continued from page 1).

Commission (NRC) reviewed NASA's FSS Plan. Peecook said the FSS Plan guides the entire process, and answers such questions as "What our cleanup levels - called Derived Concentration Guideline Levels (DCGLs) - are…and how do we know when we're done cleaning, how we prove it, how much we have to survey, and what kind of instruments we use." When an area is decontaminated to cleanup levels, it is secured and posted with a green sign to keep out anyone unconnected with FSS work. The entire Reactor Facility site must meet the cleanup levels at the end of decommissioning before the NRC can terminate NASA's reactor license.

According to Bill Stoner, NASA's Project Radiation Safety Officer, the FSS process is a complex, multifaceted task. It begins with performing post-decontamination surveys and inspections to verify that cleanup objectives have been met. Then, detailed instructions are developed to direct the FSS Technicians on how and where to perform the Survey. It involves scanning building surfaces and collecting stationary measurements using highly sensitive radiological instrumentation capable of detecting beta and gamma radiation.

After the FSS is performed, the data is collected and carefully reviewed to ensure it meets all of the quality control requirements. Finally, a report is written to summarize all of the survey findings and is sent to the NRC for review and approval. In addition, the NRC has a third party conduct an Independent Verification Survey. This is being done by the Oak Ridge Institute for Science and Engineering (ORISE), which is working with NASA on-site. "We have a highly experienced FSS staff and I have great confidence in their abilities," said Stoner. "The FSS team's goal is to produce high-quality data that meet the strict requirements of the FSS Plan and to demonstrate that the site is ready for license termination." ■

NASA Glenn to Hold Open House Events at Lewis Field and Plum Brook Station.

NASA Glenn will hold Open House events for the public at both its Lewis Field (Cleveland) and Plum Brook Station (Sandusky) facilities this spring.

OPEN HOUSE.

Lewis Field.
Saturday, May 17 & Sunday, May 18

Plum Brook Station.
Saturday, May 31 & Sunday, June 1

Upcoming details will be available on our Decommissioning Website at www.grc.nasa.gov/WWW/pbrf and on our 24-hour, toll-free Decommissioning Information Line at 1-800-260-3838.

LEARN MORE ABOUT NASA's
Decommissioning Project.
See Our Next Edition in June.